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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/798,767

03/11/2004

Michael L. Britt

979619010004

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09/20/2006

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EXAMINER

MANOHARAN, VIRGINIA

ART UNIT

PAPER NUMBER

1764

DATE MAILED: 09/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/798,767

Applicant(s)

BRITT, MICHAEL L.

Examiner

Virginia Manoharan

Art Unit

1764

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 10 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 9-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 9-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

Applicant's election of Group II, claims 9-19 in the reply filed on October 21, 2005 is acknowledged.

The abstract of the disclosure is objected to because of the following reasons:

- 1). the inclusion of legal phraseology often used in patent claims such as "comprises" in line 1 is improper.
- 2). The abstract should set for the elements of the apparatus to which the claims are directed. See MPEP § 608.01(b).

The specification has not been checked to the extent necessary to determine the presence of all possible minor errors, e.g., typographical, grammar, idiomatic, syntax and etc. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 9-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- a). The claimed "a distillation tank" (singular) is inconsistent with "both distillation tanks" (plural) in lines 5 and 8 respectively of claim 14.
- b). The numerously recited "is configured" fails to ascertain the claimed invention with precision especially, since the claims do not recite the specific configuration of the structures. For example, in claim 1, how is the thermal drive structurally configured to drive the vapor from the distillation tank back to the reservoir?

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- c). The claimed "the extracting" in claim 17 lacks antecedent support.
- d). The addition of the phrase "in the form of" like the word "type" renders an otherwise definite expressions indefinite at it extends the scope of the expression. Ex parte Copenhaver, 109 USPTO 118 Bd (1955). See claims 9 and 17-19.
- e). The preambles of the independent claims all recite an extraction system, however the bodies of the claims are directed to combination of both extraction tank and distillation tank, not just an extraction device.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 9-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reid (1,802,533) or Low (6,589,422) in view of Oesch et al (5,082,535).

Either Reid or Low discloses a system comprising: an extraction tank for flowing the solvent liquid; a distillation tank for distilling off the solvent from the mixture; and a thermal drive apparatus for thermally driving solvent vapor from the distillation tank to a reservoir. See the drawing of Reid; and cols.1-5 of Low. See Reid at page 2, lines 48-59; and Low at col. 3, lines 54-64 suggesting the claimed thermal device.

The apparatus of Reid or Low differs from the claimed invention in that claim 9, for example, recites a reservoir for holding a solvent liquid; and a pump for pumping solvent liquid from the reservoir to the extraction tank. Claims 14 and 19 further recite

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an oil collection tank connected to both distillation; and a purge tank respectively.

However, said limitations are known in the art. See e.g., the solvent and oil reservoirs shown in Fig.1 of the Oesch's reference. To incorporate the structural elements shown by Oesch to the apparatus of either of the above references would have been obvious to one of ordinary skill in the art since all the references are directed to the same processing environment, i.e., to a combination extraction and distillation method and device; and since Low, for example suggest a storage vessel (receiver) deemed corresponding to the claimed oil reservoir. The further recitation in claim 17 of "the system being configured to be closed to the atmosphere during the flowing, the extracting and the distilling, and further configured to enable replacing the solvent in the system with a second solvent while the system remains closed to the atmosphere" and the process limitations recited e.g., in claims 12-13 and 16 do not recite any element of a device, and accordingly cannot be distinguished from the prior art in the structural sense. [The process limitation(s) can be recited in terms of apparatus by "a means for" language(s) which is authorized by 35 USC, 6<sup>th</sup> paragraph].

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

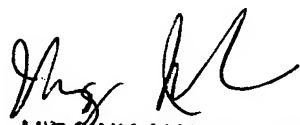
- a). Davis et al and Donnelly et al both disclose a solvent recovery plant.
- b). Spring et al and Mar both disclose an extractor in combination with a distiller.
- c). Kuerston et al discloses an apparatus and method for heavy oil extraction.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to V. Manoharan whose telephone number is (571) 272-1450.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on (571) 272-1444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
VIRGINIA MANOHARAN  
PRIMARY EXAMINER  
ART UNIT 133 / 764f